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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

SCHWARTZ, PAMELA R

ART UNIT	PAPER NUMBER
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1774

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DATE MAILED: 10/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application N .

09/845,296

Applicant(s)

IWATA, TETSU

Examiner

Pamela R. Schwartz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 10 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-11 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☒ Interview Summary (PTO-413) Paper No(s) 6.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-9, drawn to a ink-jet recording medium, classified in class 428, subclass 195.
  - II. Claim 10, drawn to an ink jet printed article, classified in class 428, subclass 204.
  - III. Claim 11, drawn to an image forming method, classified in class 347, subclass 105.

The inventions are distinct, each from the other because of the following reasons:

Inventions of Group I and of Group II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as writing paper for receiving an image from a ballpoint pen and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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Inventions of Group I and of Group III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product can be used in a materially different process, such as the process of writing with a ballpoint pen.

Inventions of Group II and of Group III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by a materially different process such as by spray coating the transparent material onto the printed recording medium without the use of heat.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

In a written preliminary amendment submitted on September 23, 2002, applicants' representative elected Group I, claims 1-9, in response to the oral request for a provisional election. The election is not considered to be provisional since it has been made in writing and contains reasons for the traversal.

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Applicant's election with traverse of Group I in Paper No. 6 is acknowledged.

The traversal is on the ground(s) that examination by a single examiner will save overall time, will lead to more uniform prosecution, and could be accomplished without undue effort. This is not found persuasive because the restriction as set forth is believed to be proper and the inventions are distinct and require separate and distinct searches.

The requirement is not made final so that applicants' representative has an opportunity to respond to the particulars of the restriction requirement that were not conveyed by phone and are set forth above.

Claims 10 and 11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 6.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 6-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tomizawa et al. (5,985,425). The reference discloses an ink jet recording medium having an ink receptive layer of crosslinking agent and water-soluble polymer (see col. 4, lines 32-34). The water-soluble polymer may be polyvinyl alcohol of average polymerization degree of 1000 to 3000 and saponification degree in the range of 75% to 90%. (see col. 4, lines 1-15).

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Silica of average particle diameter of 1 to 6 microns is also be present in the layer (col. 4, lines 52-60). The quantity of polyvinyl alcohol present may be in the instantly claimed range since the silica is present in a range of from 50 to 200% of the water-soluble resin (col. 5, lines 1-4).

While the limitations of these claims appears to be anticipated by the reference, to the extent that any of the proportions and ranges of these claims do not precisely overlap, it would have been obvious to one of ordinary skill in the art to determine values from within the ranges recited by the reference in order to obtain a recording material with properties as set forth by the reference in col. 2, such as excellent fixing of water-based inks, water resistance, lack of stickiness during storage, formation of circular ink dots, high pattern resolution, etc.

3. Claims 1-4, 6, 7 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sakaki et al. (4,783,376).

The reference discloses a recording medium having a coating layer including a crosslinking polymer and a cationic modified PVA (see col. 6, lines 20-26). The PVA has a degree of saponification of 70-93% and a degree of polymerization preferably from 300 to 3000 (col. 7, lines 17-43). The layer contains a crosslinking agent which may be an isocyanate (col. 7, lines 54-56). The examples indicate that the quantity of polyvinyl alcohol is within the range set forth by claim 2 (see the Examples). While it is believed that the claimed invention is fully anticipated, it would have been obvious to one of ordinary skill in this art to determine materials, proportions and property values from within the ranges set forth by the prior art in order to achieve high quality images.

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4. Claims 1-4, 6, 7 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by Ito et al. (5,912,085).

Ito et al. disclose a recording medium having an ink-receiving layer comprising ink absorptive resin, a curing agent and a surfactant. The resin is preferably polyvinyl alcohol with a polymerization degree of 1400-2500, a saponification value of 85-90, and preferably present in quantities for 50 to 99 wt. % (col. 5, line 65 to col. 6, line 21). The curing agent may be an epoxy resin or an isocyanate (see col. 6, lines 22-27). Silica may be present in particles sizes preferably not less than 0.3 microns (col. 7, lines 28-42).

5. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. See the sections of the disclosure set forth above.

Based upon this disclosure, it would have been obvious to one of ordinary skill in the art to determine the type of cross-linking agent from those disclosed by the reference and the particle size of the silica, in order to achieve desired properties of water resistance, high gloss, quality and grade as set forth by the Ito et al.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela R. Schwartz whose telephone number is 703-308-2424. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on (703) 308-0449. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

PRSchwartz  
September 24, 2002



PAMELA R. SCHWARTZ  
PRIMARY EXAMINER